

# STANAG magazine

A **STANAG magazine**<sup>[1][2]</sup> or **NATO magazine** is a type of detachable firearm magazine proposed by NATO in October 1980.<sup>[3]</sup> Shortly after NATO's acceptance of the 5.56×45mm NATO rifle cartridge, Draft Standardization Agreement (STANAG) 4179 was proposed in order to allow NATO members to easily share rifle ammunition and magazines down to the individual soldier level. The U.S. M16 rifle's magazine proportions were proposed for standardization. Many NATO members, but not all, subsequently developed or purchased rifles with the ability to accept this type of magazine. However, the standard was never ratified and remains a "Draft STANAG".<sup>[4]</sup>



Two STANAG-compliant magazines: A 20-round Colt-manufactured magazine, and a 30-round Heckler & Koch "High Reliability" magazine.

## Magazines

The STANAG magazine concept is only an interface, dimensional and controls (magazine latch, bolt stop, etc.) requirement.<sup>[2][5]</sup> Therefore, it not only allows one type of magazine to interface with various weapon systems,<sup>[2][5]</sup> but also allows STANAG magazines to be made in various configurations and capacities.<sup>[2][5]</sup> The standard capacities of STANAG-compatible magazines are 20 or 30 rounds of 5.56×45mm NATO ammunition. There are also 5-, 10-, 40- and 50-round box magazines,<sup>[5]</sup> as well as 60- and 100-round casket magazines,<sup>[6][7]</sup> 90-round snail-drum magazines,<sup>[8]</sup> and 100-round drum magazines.<sup>[9]</sup> There has also been a 150-round drum magazine produced.

## Issues and improvements

The STANAG magazine, while relatively compact compared to other types of 5.56×45mm NATO box magazines, has often been criticized for a perceived lack of durability and a tendency to malfunction unless treated with a level of care that may not be practical under combat conditions. Because STANAG 4179 is only a dimensional standard, production quality from manufacturer to manufacturer is not uniform. Magazines have been manufactured with lightweight aluminum or plastic bodies and other inexpensive materials in order to keep costs down, or to meet requirements that treat the magazine more as a disposable piece of equipment than one that is supposed to stand up to repeated combat use.



Close-up of L85A2 with Magpul Industries EMAG polymer magazine with clear viewing window

As a result, in March 2009, the U.S. military began to accept delivery of improved STANAG magazines.<sup>[10]</sup> To increase reliability, these magazines incorporate heavier, more corrosion resistant springs and new tan-colored anti-tilt followers.<sup>[11]</sup> In addition, many commercial magazine manufacturers now offer improved STANAG-compatible magazines. These magazines are made from high-grade stainless steel bodies, rust- and set-resistant chrome-silicon springs, and anti-tilt followers. There are also highly reliable polymer magazines, some with view windows, others are translucent.

ARDEC began development of a new magazine design in July 2013 to address feeding issues of older designs with the new M855A1 Enhanced Performance Round. It was first made public in 2014 and completed development in mid-2016 as the Enhanced Performance Magazine. The magazine uses a blue follower and a tan body which presents the rounds with a better angle to the weapon's feedway, preventing the hardened steel tip of the EPR from contacting the aluminum feed ramp of the M4 carbine, increasing mean rounds between stoppage by 300%.<sup>[12][13]</sup>

## Gallery



Standard issue 30-round M16 magazine.



Loaded STANAG magazines



Close-up of loaded STANAG magazine



Improved M16 magazine follower



USGI Enhanced Performance Magazine (EPM) magazine for AR-type rifles<sup>[14]</sup>



The Feed Lips Wear Tool is designed for inspecting STANAG magazines



T91 30-round STANAG-compliant magazine with ammo capacity indicator.



STANAG-compliant 30-round PMAG magazine with Ranger Plate from Magpul Industries. Note: clear viewing window.

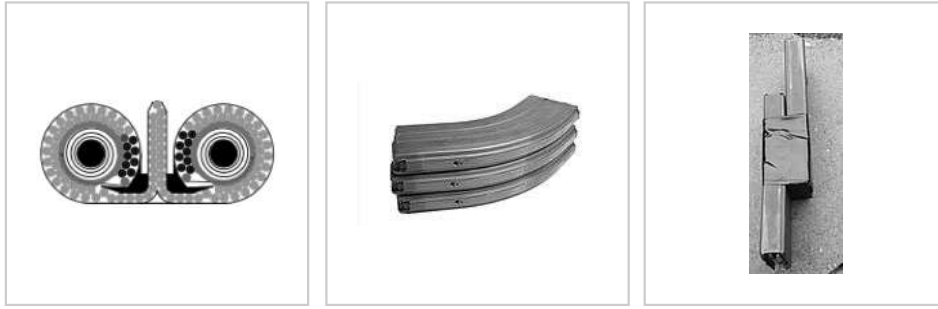


Diagram of a  
STANAG Beta C  
magazine

Beta C

In order to comply with civilian legal restrictions, STANAG 30-round magazines may be pinned to hold only 5 rounds.

Two STANAG 30-round magazines placed together with duct tape in the "Jungle style".

## Firearms compatible with STANAG magazines

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### AR-15/M16 type rifles

- AAC Honey Badger PDW
- ArmaLite AR-15
- Barrett REC7
- CAR 816
- Colt M16
- Colt M4
- Colt Automatic Rifle
- Colt Canada C7 and C8
- G5 carbine
- Haenel MK 556
- Heckler & Koch HK416
- LWRC M6
- Marine Scout Sniper Rifle
- Norinco CQ
- PVAR
- R5 RGP
- Remington GPC
- Remington R-15
- Ruger SR-556
- Safir T-15, T-16 and T-17
- SIG MCX
- SIG Sauer SIG516
- SIG Sauer SIGM400
- Smith & Wesson M&P15
- SOAR
- Type 86
- Type 91
- Unified Weapon Systems, Unified Patrol Rifle
- Windham Weaponry WW-15
- Z-M Weapons LR 300
- Rock River Arms LAR-15

### Non-AR-15/M16 type rifles

- Ares SCR
- Armalite AR-180B
- Beretta AR70/90
- Beretta ARX-160
- Beretta Rx4 Storm
- Bernardelli VB-SR
- Benelli MR1
- Bofors Carl Gustaf Ak 5
- Bushmaster ACR
- Bushmaster M17S

- CETME Model L
- CZ BREN 2
- Daewoo K1
- Daewoo K2
- Daewoo K3
- Daewoo K11
- Desert Tech MDR
- Diseños Casanave SC-2005
- EMERK
- FAD assault rifle
- FAMAS G2
- Fateh assault rifle
- FN F2000
- FN FNC
- FN Minimi/M249 SAW
- FN SCAR-L
- Fort Ellis XR-86<sup>[15]</sup>
- FaB 556
- Heckler & Koch G41
- Howa Type 89
- IFAR 22
- IMBEL IA2
- IMBEL MD2
- IMI Negev
- IMI Tavor TAR-21
- IWI Tavor X95
- IWI Galil ACE N
- Kalashnikov SR-1
- Kel-Tec PLR-16
- Kel-Tec RDB
- Kel-Tec SU-16
- KH-2002
- LAPA FA-03
- Magpul PDR
- MKEK MPT
- MSAR STG 556 "E4 Model"
- MSBS Grot
- Nabi assault rifle
- Norinco QBZ-97

- Norinco Type 03 assault rifle (export models)
- Pindad SS1
- Pindad SS2
- Pindad SS3
- Robinson Armaments M-96 "Expeditionary Rifle"
- Robinson Armaments XCR
- Rung Paisarn RPS-001
- SA80
- SAR-21 (export models)<sup>[16]</sup>
- SAR-80
- SR-88
- SIG 556
- Sterling SAR-87
- Steyr AUG (NATO variant)
- Leader T2 MK5 rifle
- Type 65
- VB Berapi LP06
- VHS
- Vulcan V18
- Type XT-97
- XM29 OICW
- Zastava M85

### Manually operated rifles

- BMS Cam rifle
- Crossfire MKI<sup>[17]</sup>
- Mossberg MVP
- ISSC Pump Action Rifle (PAR)
- LW-S1<sup>[18]</sup>
- POF USA ReVolt Light
- Remington Model 7615P
- Ruger American Ranch and Predator
- Troy Pump Action Rifle (PAR)
- Voere S16<sup>[19]</sup>
- Q Mini FIX
- *Aftermarket STANAG bottom metals are also available for the Remington Model 700 (modification by gunsmith required)*<sup>[20][21][22]</sup>

### STANAG magazine convertible rifles

- CZ-805 BREN (through housing conversion)

- Heckler & Koch G36 (modular magazine well) [1] (<http://www.hkparts.net/shop/pc/AR15-Mag-Well-Adapter-for-HK-SL8-p800.htm>)
- IMI Galil (through adaptor)[2] (<http://media.photobucket.com/image/galil%20m16%20magazine%20adapter/Smittyd5r/Gun%2520Stuff/ORFGalilARFG1.jpg>)
- SAR 21 (through swapping lower receiver with the one from export model)
- Steyr AUG (through right hand only STANAG magazine stock assembly)[3] (<http://steyr-aug.com/Am161.jpg>)[23]
- CM901 (with 5.56 adapter block)
- Wz. 1996 Beryl (through adaptor)[4] (<http://sjs-siedlce.pl/artykuly/sprzet-i-umundurowanie/karabinek-beryl-wz-96>)

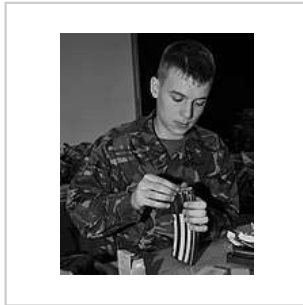
## Loading tools

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Loading a STANAG magazine, particularly one with a large capacity and a corresponding high spring pressure pushing the rounds to the top of the magazine, can be quite difficult. A number of devices are available to make this task simpler. These are sometimes called speedloaders but are more commonly known as magazine loaders, stripper clips, spoons, or stripper clip guides. There are a wide range of

both commercial and military type loading tools available for STANAG magazines. For example; draft **STANAG 4181** is a type of stripper clip and guide tool proposed for standardization based on the USGI M16 rifle stripper clips and guide tools.<sup>[24]</sup>

## Gallery



Manually loading a magazine with individual rounds.



STANAG guide tools and stripper clip filled with 5.56mm NATO ammo.



Close-up of STANAG guide tool.



Loading a magazine with STANAG stripper clip and guide tool.



Ditto, with stripper clip pressed against a hard surface to load the magazine more quickly.



Loading a magazine with loading tool.



Loading a magazine with an alternative style of loading tool.



M-16 / AR-15 LULA magazine loader and unloader.





StripLULA™ loading tool.



BenchLoader heavy-duty magazine loader.



Trijent Mech-loader for high volume loading

## Additional information

- The "RAM-LINE 30-round COMBO MAG" is a uniquely notable STANAG magazine. These commercial translucent plastic magazines can be used in both AR-15 type rifles and Ruger Mini-14 type rifles.<sup>[25]</sup>
- Magnolia States Armory offers an adapter that allows the use of STANAG magazines in 5.56mm Galil rifles as well as one that works in a variety of 5.56mm AK-47 type rifles such as the Saiga, WASR3 and Norinco rifles.
- While STANAG magazines are typically loaded with 5.56 mm NATO ammo, they are also used for other calibers as well.
- There are also a wide range of dummy STANAG magazines in a variety of sizes, weights and colors for training purposes.



STANAG magazines loaded with .223 Rem (left) and .450 Bushmaster (right)

## See also

- List of AR platform cartridges
- SR-25 pattern magazine, a scaled up version of the STANAG magazine for .308 based cartridges.
- AICS-style magazine, an emerging standard for bolt-action rifle magazines.

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